

Listing of Claims:

Claim 1. (currently amended) A hybrid drive assembly-(1) for a vehicle having at least one drive wheel-(2), the drive assembly comprising an internal combustion engine-(3); and a transmission unit-(5) interposed between a drive shaft-(4) of the internal combustion engine-(3) and a propeller shaft-(6) connected angularly to the drive wheel-(2), and in turn comprising a clutch-(8) and a transmission-(7), having a drive element-(10) connected angularly to the drive shaft-(4) of the internal combustion engine-(3) and a driven element-(11) connectable to said propeller shaft-(6); the drive assembly-(1) further including an electric machine-(32) which can be operated instead of or in combination with said internal combustion engine-(3), characterized in that said clutch-(8) is interposed between said driven element-(11) of said transmission and said propeller shaft-(6), and has a drive member-(20) connectable to said driven element-(11) of said transmission-(7) and a driven member-(26) connected to the propeller shaft-(6), said electric machine-(32) comprising a rotor-(35) connected angularly and permanently to said driven member-(26) of said clutch-(8).

Claim 2. (currently amended) A drive assembly as claimed in Claim 1, characterized in that said transmission-(7) is a CVT, said drive element-(10) and driven element-(11) consisting of a drive pulley-(10) and, respectively, a driven pulley-(11) of said CVT.

Claim 3. (currently amended) A drive assembly as claimed in Claim 1-~~or 2~~, characterized in that said clutch-(8) is a centrifugal clutch; said driven member of said clutch-(8) being a bell-(26)-integral with said propeller shaft-(6).

Claim 4. (currently amended) A drive assembly as claimed in Claim 3, characterized in that said rotor-(35) of said electric machine-(32) is coaxial and integral with said bell-(26) of said clutch-(8).

Claim 5. (currently amended) A drive assembly as claimed in ~~any one of the foregoing~~ ~~Claims~~ claim 1, characterized in that said electric machine-(32) is reversible.

Claim 6. (currently amended) A drive assembly as claimed in ~~one of the foregoing~~ ~~Claims~~claim 1, characterized by comprising a coupling-(51) interposed between said drive shaft-(4) and said drive member-(20) of said clutch-(8).

Claim 7. (currently amended) A drive assembly as claimed in Claim 6, characterized in that said coupling-(51) is controlled electromagnetically.

Claim 8. (currently amended) A drive assembly as claimed in Claim 6-~~or 7, when dependent on one of Claims 2 to 5~~, characterized in that said coupling-(51) is interposed between said driven pulley-(11) and said drive member-(20) of said clutch-(8).

Claim 9. (currently amended) A drive assembly as claimed in ~~any one of the foregoing~~ ~~Claims~~claim 1, characterized by comprising an electric generator-(37) driven by said internal combustion engine-(3).

Claim 10. (currently amended) A drive assembly as claimed in ~~any one of the foregoing~~ ~~Claims~~claim 1, characterized by comprising a control unit-(38) for controlling said internal combustion engine-(3) and said electric machine-(32), in response to a number of input signals (Sa, Sf, Ss), in a number of operating modes comprising at least a combustion mode wherein only the internal combustion engine-(3) is activated, an electric mode wherein said electric machine-(32) operates as a motor and said internal combustion engine-(3) is disabled, a parallel hybrid mode wherein said internal combustion engine-(3) and said electric machine-(32) are both activated and connected to said drive wheel-(2), and a series hybrid mode wherein said internal combustion engine is disconnected from said drive wheel-(2) and drives said electric generator-(37).

Claim 11. (currently amended) A drive assembly as claimed in Claim 10, characterized by comprising selecting means-(46) for selecting said operating modes of said drive assembly-(1);

said input signals (Sa, Sf, Ss) comprising at least a number of input signals (Ss) generated by said selecting means-(46).

Claim 12. (currently amended) A drive assembly as claimed in Claim 10-~~or 11~~, characterized in that said input signals (Sa, Sf, Ss) comprise a signal (Sa) indicating the position of an accelerator member-(44).

Claim 13. (currently amended) A drive assembly as claimed in ~~one of Claims 10 to 12~~claim 10, characterized in that said input signals (Sn, Sf, Ss) comprise a signal indicating actions on a brake control member-(45) of the vehicle.

Claim 14. (currently amended) A vehicle having at least one drive wheel-(2), characterized by comprising a hybrid drive assembly-(1) as claimed in ~~any one of the foregoing Claims~~claim 1.

Claim 15. (original) A vehicle as claimed in Claimed 14, characterized by being a scooter.

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